John T. Conway, Chairman
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DEFENSE NUCLEAR FACILITIES SAFETY BOARD

625 Indiana Avenue, NW, Suite 700, Washington, D.C. 20004 (202) 208-6400



July 15, 1996

The Honorable Alvin L. Alm Assistant Secretary for Environmental Management Department of Energy 1000 Independence Avenue, SW Washington, DC 20585-1000

Dear Mr. Alm:

The Defense Nuclear Facilities Safety Board's (Board) staff has reviewed the analyses supporting an Authorization Basis for Building 771 at the Rocky Flats Environmental Technology Site (RFETS). Observations made by the Board's staff are reflected in the enclosed trip reports.

The Board believes that the action proposed by Kaiser-Hill to apply the Process Hazards Analysis methodology, similar to that presented in 29 CFR 1910, Occupational Safety and Health Standards, to the higher hazard activities will enhance safety of operations at RFETS. This methodology has also been implemented at the Savannah River Site and is a systematic approach to identifying the vulnerabilities from an operation or activity. Implementation of controls to prevent or mitigate such vulnerabilities, coupled with considerations of defense-in-depth, would provide a reliable process for protection of the workers. Therefore, application of this safety process may be warranted at other defense nuclear facilities.

A significant number of transuranic (TRU) waste drums are stored in plutonium buildings and waste storage facilities at RFETS. An attendant safety issue for such storage is the potential for generation of flammable gases as a result of radiolytic decomposition of the waste forms. The site had scheduled all these drums to be vented by the end of fiscal year 1995 as part of the site risk reduction program. Although more than 500 drums remain unvented, venting of the drums was discontinued last year. The Board believes that venting of TRU waste drums, especially those containing ion exchange resins or cemented sludge, warrants a priority higher than the one currently assigned by the Department of Energy.

Should you need any additional information, please do not hesitate to call me.

Sincerely,

John T. Conway

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